

Standards & Preferred Practices Web Links for Reliability & Maintainability (R&M)

Web Link	Description
http://standards.nasa.gov/	NASA's Technical Standards Program. To locate R&M standards: (1) Log in and (2) Click "Agency wide Full-Text Technical Standards System." To locate the international standards related to R&M, enter "dependability" in the "Title Key Word(s)" field and compare the results of searches that use only the words "reliability" and/or "maintainability."
http://www.hq.nasa.gov/office/codeq/rm/prefprac.htm http://nen.nasa.gov/portal/site/llis/menuitem.41d2c6248694d611b649cc1036793ea0/	NASA's Preferred Practices for R&M and for Design and Test (first link). Updates are available in the second link, NASA's Lessons Learned Information System (LLIS).
http://www.hq.nasa.gov/office/codeq/87291.pdf	NASA-STD-8729.1 is a centralized source of information for establishing R&M performance-based requirements, design factors, and metrics for use on all new NASA programs/projects and contracts. This document is intended as a guide to current techniques to identify and meet customer product performance expectations. It is structured to reflect the requirements of NPG 7120.5A. It replaces previous NASA handbooks which were derived from military standards and which mandated general reliability and maintainability requirements for NASA programs/projects. This guidance is intended to assist engineering managers in achieving the R&M objectives listed on page 1-1 throughout the life cycle of NASA in-house and contracted activities.
http://kscsma.ksc.nasa.gov/Reliability/Documents/R&MAnalysis.pdf	JSC28549 , NASA JSC's R&M requirements for data analysis and assessment of space shuttle and other spacecraft elements. The quantitative techniques require system operating/failure data.
http://src.alionscience.com/ http://src.alionscience.com/pdf/RELREQ.pdf http://src.alionscience.com/pdf/rbd.pdf	System Reliability Center (SRC). On the first link, click "START" to find tutorials on a variety of topics on reliability and related disciplines. The second and third links are examples of tutorials on developing reliability requirements and creating robust designs. To find a listing of standards , click the first link and then click the last link in the center column—then use the NASA's Technical Standards Program (use link in first row) to see if this standard is quickly available to you.
http://members.aol.com/JohnDMusa/ http://www.software-supportability.org/ReliabStandards.html#JA1003	John D. Musa's, AT&T Bell Laboratories , software reliability engineering site. The second link is on software reliability standards and guidelines and provides "annotated descriptions of the SAE G-11 RMSL Software Committee reliability standard and associated implementation guide.
http://www.enre.umd.edu/publications/rs&h.htm	The Center for Risk and Reliability (CRR) at University of Maryland's listing and a description of military standards related to Reliability .
http://www.itl.nist.gov/div898/handbook/index.htm	National Institute of Standards and Technology (NIST) 's Engineering Statistics Handbook. The chapter on Reliability describes the terms, models, and techniques used to evaluate and predict reliability.

Notes:

1. NASA links are above the bold line. Non-NASA links are below the bold line.
2. To activate links without using the "Ctrl" key: Go to Tools, Options, Edit tab, and uncheck the item "Use CTRL + Click to follow hyperlink."